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(71) Applicant:

ISHIKAWAJIMA HARIMA HEAVY

IND CO LTD.

(72) Inventor:

HASEGAWA KAZUMI

## (54) NO-LOAD OPERATION CONTROL DEVICE OF COMPRESSOR

(57) Abstract:

PURPOSE: To make it possible to previously and cerfaimly prevent the generation of surging by detecting air vibration generated just before a substantial surging generation and operating a compressor with no-load.

CONSTITUTION: A compressor comes to rush in a surging region when a compressor reaches a region difficult to be controlled under a constant pressure because of reduction of compressed air quantity consumed by a load equipment, being accompanied by the reduction of air flow Q. Immediately before this rush into the surging region, a controller 7b detects presurge via a sensor part 7a provided on the discharge opening 14 of the compressor 1, and provides an actuatin signal for closing a suction valve 4 to a suction valve driver 5. And it simultaneously provides an actuation signal for opening a blowoff valve 12 to a blowoff valve driver 13, whereby the suction valve 4 closes, and the blowoff valve 12 opens to provide a no-load operation, making it possible to previously prevent the generation

of surging.

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